

REMARKS

In the Office Action the Examiner rejected the claims under 35 U.S.C. § 112, second paragraph as being incomplete for omitting an essential step. The Examiner observed that while the claims call for a protein crosslinking agent, there is nothing in the emulsion that would become crosslinked. Because the Examiner concluded that there was nothing in the emulsion that would become crosslinked, he also rejected the claims under 35 U.S.C. § 112, first paragraph.

The Examiner rejected Claims 20-22 under 35 U.S.C. § 102(b) as having been anticipated by Gough (U.S. Patent No. 4,890,620). The Examiner pointed out that both the buffer solution and the gel as a whole are substances that can dissolve oxygen.

Claim Rejections under 35 U.S.C. § 112, First and Second Paragraphs

Applicant respectfully traverses these rejections. The specification makes it clear that one embodiment of the invention includes emulsifying an oxidase solution with a water immiscible oxygen-dissolving compound and then using a protein crosslinking agent to crosslink the oxidase molecules. Applicant believes that those of ordinary skill in the art will recognize that enzymes are proteins and that as such will be crosslinked by a protein crosslinking agent. Nevertheless, the claims have been amended to make it clear that the gel is formed by crosslinking the enzyme molecules or the enzyme and carrier protein molecules when a carrier protein is present. Perhaps the Examiner is considering that the enzyme might be present as only a trace, but the specification (page 16) indicates that the enzyme is preferably present at 1-5% which is more than sufficient protein to be crosslinked into a gel. In addition, the claims have been amended and a new claim added to read on the embodiment where the enzyme is added after the crosslinking

Page 7 of 8

Patent Application
Serial No. 10/058,453

agent so that the gel is formed mostly by crosslinking the carrier protein molecules—thus protecting the enzyme from potentially denaturing crosslinks.

Claim Rejections Under 35 U.S.C. §102(b)

The Examiner is correct in pointing out that substances in **Gough** can dissolve oxygen. The intent of the claim was to refer to water immiscible substances that have unusually good oxygen dissolving properties—but the claim language did not say that. The base claim has been amended to incorporate the limitations of original Claim 23. Certainly, **Gough** did not disclose or suggest incorporating any of the substances contained in original Claim 23. As the prior art does not now show every element of the claimed invention, Applicant respectfully requests the rejection be withdrawn.

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

If for any reason the Examiner still finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles telephone number listed below to discuss the steps necessary for placing the application in condition for allowance.

Page 8 of 8

Patent Application
Serial No. 10/058,453

You are hereby authorized to charge any fees due and refund any surplus fees to our Deposit Account No. 50-2567.

Respectfully submitted,

REED SMITH

Date: 26 February 2004

By:

Stefan J. Kirchanski
Stefan J. Kirchanski
Registration No. 36,568
Attorney for Applicants

1901 Avenue of the Stars, Suite 700
Los Angeles, CA 90067
Telephone: (310) 734-5200
Facsimile: (310) 734-5299